

# Review on STEM OPT Policy and Impact

Henry Chen

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## Abstract

This report tests the validity of using STEM OPT as an exogenous instrument for the Immigrant entrepreneur supply, in specific, invoking labor supply increment. However, several test results suggest that this STEM OPT instrument is not powerful to predict the expansion of immigrant entrepreneurship supply increase. It turns out that the main expansion in 2016 actually predicted lower immigrant entrepreneurship relative to natives. This report briefly introduces the history of STEM OPT and exhibits multiple estimation results.

# 1 Task:

This report aims to determine whether the STEM OPT Extension/Expansion could serve as a viable and practical means to identify a demand shock to foreign investment in firms founded by immigrants. Two topics are focused on assessing the STEM OPT Extension/Expansion:

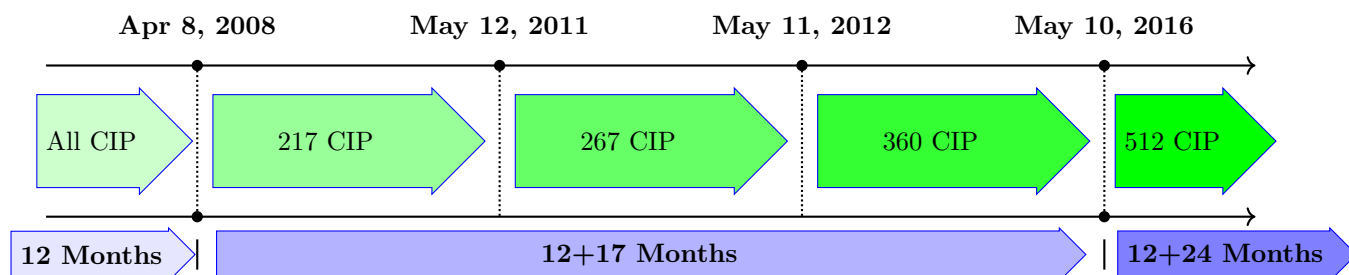
- Review the history of STEM OPT policy
- Analyze the impact of STEM OPT Extension/Expansion on the labor market (the entrepreneur market specifically).

# 2 History of STEM OPT

There exist four crucial timestamps in the history of STEM OPT.

- **Apr 8, 2008:**  
Department of Homeland Security (DHS) creates a STEM OPT list and extends those STEM majors' OPT to additional 17 months on a 12-month basis. The STEM list contains *217* CIP Codes (Programs). ([LINK](#), [CODES](#))
- **May 12, 2011:**  
U.S. Immigration and Customs Enforcement (ICE) expand the STEM list to include Neuroscience, Medical Informatics, Pharmaceuticals, Drug Design Mathematics and Computer Science. The new STEM list is now *267* CIP Codes ([LINK](#), [CODES](#))
- **May 11, 2012:**  
DHS again only expands the STEM list to involve fields such as pharmaceutical sciences, econometrics and quantitative economics. The new STEM list covers *360* CIP Codes. ([LINK](#), [CODES](#))
- **May 10, 2016:**  
DHS now extends the previous 17-month policy (total 29 months) to a 24-month one (total of 36 months). Meanwhile, DHS also expands the STEM list to cover *512* CIP Codes. ([LINK](#), [CODES](#))

Here is a timeline to demonstrate the change in STEM OPT policy over time. The timestamps listed on top of the timeline are the dates when policies become effective.



Therefore, there are both OPT length and STEM OPT coverage changes throughout its history. And thus, the network exposure to STEM OPT, potential, comes from either or both variations.

## 2.1 Restriction of Using STEM OPT

The amendment files of STEM OPT (listed in the previous “LINK”) explicitly state that

- The effect of the amendment to STEM OPT on potential immigrant entrepreneurs could be lagged. The effect could be
  - *Contemporary*: allowing more graduates to stay while seeking entrepreneurship within an allow-to-stay period, more flexibility (Monahan, 2018)

- *Lagged*: affecting a student’s choice of major (e.g. Economic return, Immigration, Opportunity sets, or Major supply (Nores, 2010; Kim, 2022; Guo, Gong, & Pang, 2019; Demirci, 2019; Cai & Winters, 2017))
- There is no strict constraint on having a graduate’s employment as a continuation of his/her major before 2016. However, the 2016 amendment requires a training plan for the application, which is an intangible restriction. This effect could disturb the measurement of exposure.
- Measurement of exposure. The literature mostly uses a set of dummy variables. However, the impact of the variation in major coverage on the local labor market may not be simply picked up by a set of dummies. (should use share and interaction instead?)
- (Pending)

## 2.2 Alternative Policies

One policy comes across. But it is not perfect.

- *International Entrepreneur Rule*: effective since 2017, which is close to the end of the data. Could hardly identify the effect.

## 2.3 Additional Notes on STEM OPT

Here is a clarification question from Melanie:

- ***“Do the OPT policy changes always only affect people who apply for OPT after the policy change? Or does the 2016 time duration extension, e.g., also affect people already on OPT?”***

Reply: The STEM OPT extension/expansion applies to those graduates who apply after the policy change. For those already with a STEM OPT, their duration will remain the same as before (i.e. no automatically extension).

## 2.4 TBD

One task to be done under this section is that build a bridge between majors listed in CIP and local industry code (i.e. NAICS). I anticipate this bridge would be helpful in identifying the local market exposure to STEM OPT extension/expansion. The idea is as follows. Using IPUMS personal-city level data to construct the city-level labor market data. Computing the share of employment in one certain industry relative to the entire local employment and interacting with the share of

- 1) share of covered STEM majors;
- 2) share of graduates from STEM over graduates;
- or 3) more?

The bridge between CIP and NAICS could be done by crosswalking on the occupation classification system used in the United States, the Standard Occupational Classification (SOC) system.

1. Link CIP codes to SOC codes: The National Center for Education Statistics (NCES) provides a crosswalk between CIP codes and SOC codes, called the CIP-to-SOC Crosswalk. This crosswalk helps identify the occupations related to specific educational programs.
2. Link SOC codes to NAICS codes: The Bureau of Labor Statistics (BLS) provides a crosswalk between SOC codes and NAICS codes, called the Industry-Occupation Matrix. This matrix shows the distribution of occupations across different industries, which can be helpful in linking SOC codes to the industries in which those occupations are commonly found.

3. Combine the two crosswalks: By combining the information from the CIP-to-SOC Crosswalk and the Industry-Occupation Matrix, you can establish a relationship between CIP codes and NAICS codes. This process can help identify the industries that are most relevant to specific educational programs.

Using OPT application information in ICE FOIA library to construct the change in share of STEM OPT application and interacting with change in the local labor market from IPUMS, it is potential to draw the city-level network exposure to change in STEM OPT policy modification. More to discuss.

### 3 Empirical Results

In this section, I present some preliminary results to evidence the concreteness of 1<sup>st</sup> stage regression,

$$\ln(\text{Int'l Investment to Immigrant founder's firm})_{n,t} = \beta * (\text{STEM OPT exposure})_{n,t} + \text{Control} + \epsilon_{n,t}$$

to see whether the STEM OPT Extension/Expansion would lead to an increment in international investment to firms aggregated at the city-year level.

- foreign investment on immigrant firm variable: *money\_raised\_billions\_internat*
- Group Indicator: *has\_internat\_investor+has\_immig\_founder*
- city variable: *CityHeadquartersLocation*
- year variable: *Year*

#### 3.1 Unit of Analysis

This section gives a simple understanding of what the structure of the sample looks like. Figure 2 shows the number of cities in the full sample over years. Four red lines highlight the timestamp in STEM OPT amendment history as listed above.

It is clear that there is no significant variation around the timestamps when STEM OPT gets extended or expanded. Figure 3 exhibits the average international investments in immigrant-founded firms.

#### 3.2 Simple Dummy Variable

I first report a simple regression of the variation of international investment to immigrant-founded firms on STEM OPT policy change timestamp dummies, aggregated at the city-year level. Table 1 shows that, when suppressing all city-level idiosyncratic effects into city-level fixed effects, the STEM OPT change dummies have different “impacts” on the foreign investment to immigrant-founded firms, compared to pre-STEM OPT change (i.e. before 2008). The regression model is as follows, for city  $i$  and year  $t$

$$\text{Int'l Invest}_{i,t} = \beta_j \sum_{\{08,11,12,16\}} \text{Dummy}_j + \text{Control}_{i,t}$$

where  $\text{Dummy}_j$  is a dummy for the STEM OPT policy change at year  $j$ .

Column (1) in Table 1 illustrates the effect of dummies on the level of foreign investments in immigrant-founded firms. Dropping the STEM OPT dummy in the year 2008 out of sight due to the potential influence of the Global Financial Crisis, there seems to have been a positive and contemporary effect of extending the STEM OPT period in 2016. And this effect is significant at the 90% confident level. Column (2), on the other hand, depicts that growth tends to decline throughout the year. It is more realistic if considering that the growth of investment follows a concave relationship over time.

It is possible that the panel data contains some cities/geolocations such that they do not have consistent records throughout the sample period. To rule out this effect, I restrict the “city” variable to having as least 14 observations within a 21-year time range. However, when we turn to a more balanced panel, the

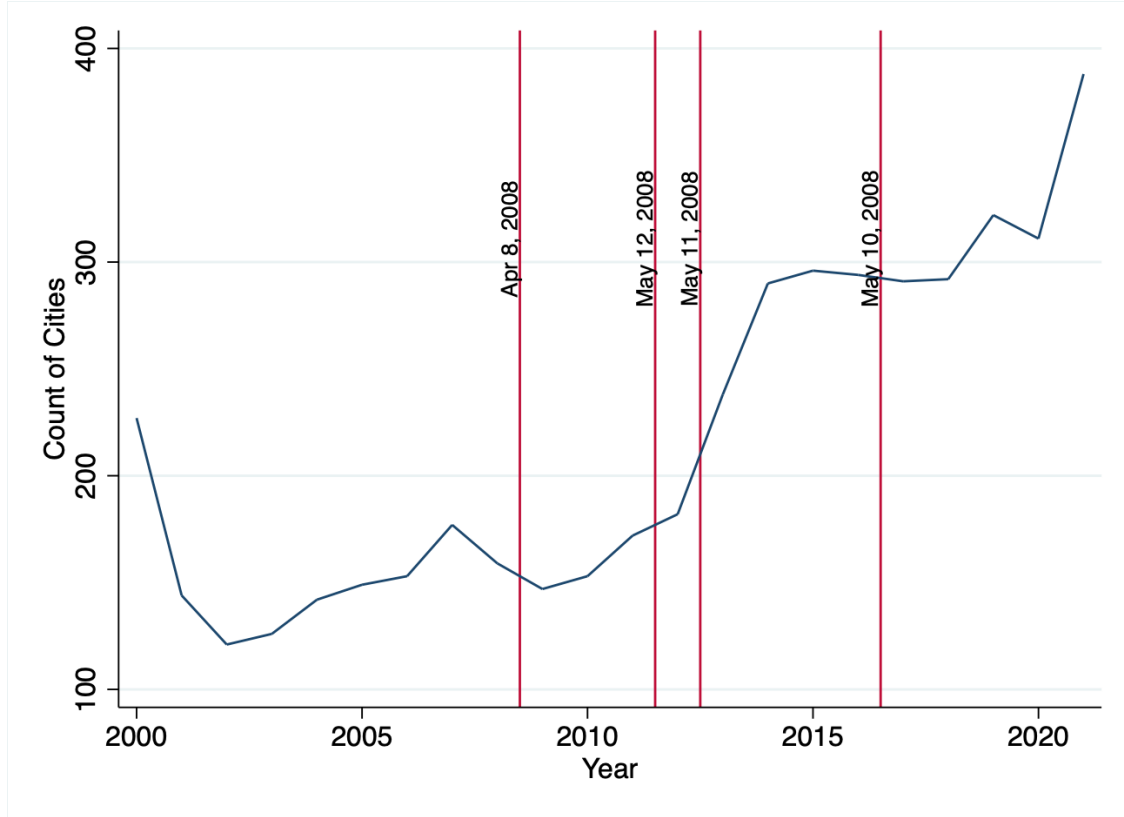


Figure 1: Number of Cities over Years

Table 1: Int'l Inv. to Immigrant Founded Firms

	(1) Level	(2) Growth
STEM OPT CHANGE ON 2008	-1.175*** (-3.305)	-0.891*** (-3.191)
STEM OPT CHANGE ON 2011	-0.383* (-1.855)	-0.043 (-0.230)
STEM OPT CHANGE ON 2012	-0.009 (-0.037)	0.054 (0.178)
STEM OPT CHANGE ON 2016	0.523* (1.791)	-0.806*** (-3.921)
L.Int'l Inv. to Immigrant Founded Firms	0.038 (0.670)	
L.Growth of Int'l Inv. to Immigrant Founded Firms		-0.523*** (-11.437)
Annual Common Trend (Year)	0.158** (2.473)	0.152*** (3.567)
Fixed Effect	City	City
Cluster Std. Error	Cluster City+Year	Cluster City+Year
Obs	1598	1120

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

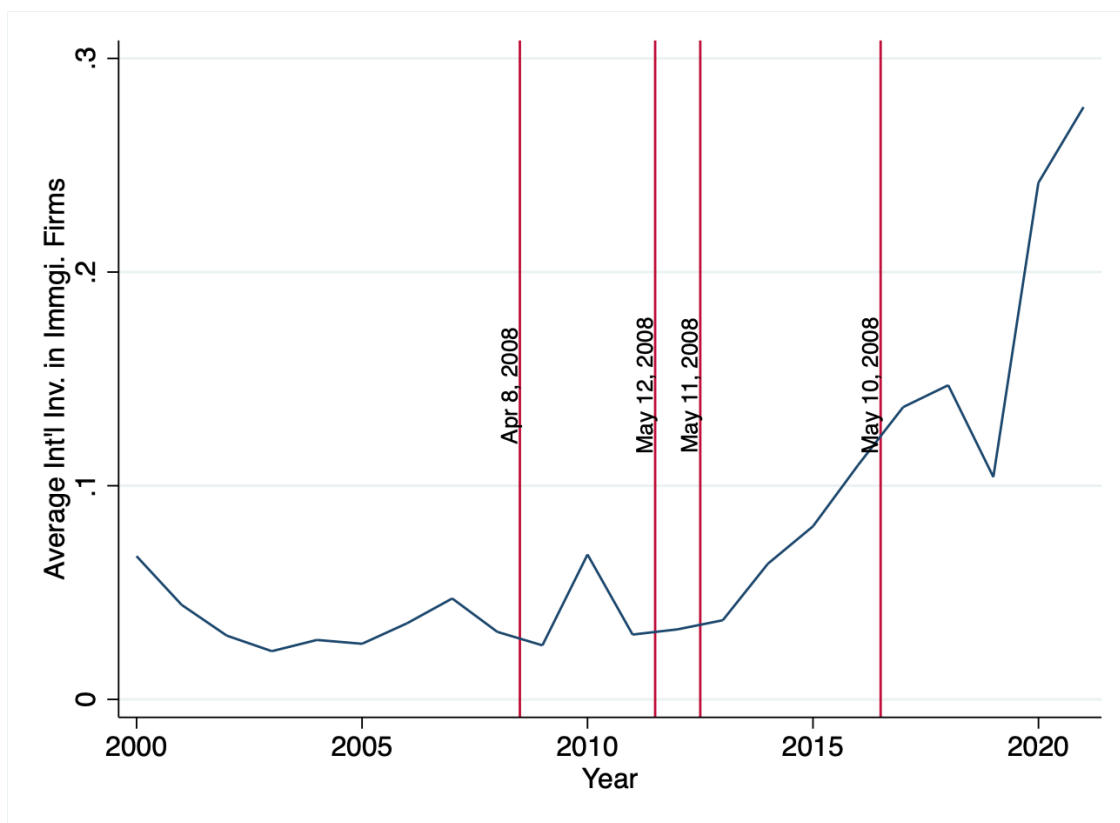


Figure 2: Average Int'l Investment in Immig. Firms over Years

significant coefficient on the 2016 dummy vanishes, and the loads on the 2008 and 2011 dummies turn more significant. The growth one remains the similar magnitude.

Table 2: Int'l Inv. to Immigrant Founded Firms: More Balanced Panel

	(1)	(2)
	Level	Growth
STEM OPT CHANGE ON 2008	-1.066*** (-3.157)	-0.966*** (-3.038)
STEM OPT CHANGE ON 2011	-0.450** (-2.322)	-0.071 (-0.376)
STEM OPT CHANGE ON 2012	0.262 (0.951)	0.075 (0.203)
STEM OPT CHANGE ON 2016	0.451 (1.422)	-0.844** (-2.675)
L.Int'l Inv. to Immigrant Founded Firms	0.117** (2.632)	
L.Growth of Int'l Inv. to Immigrant Founded Firms		-0.493*** (-14.251)
Annual Common Trend (Year)	0.148** (2.635)	0.162*** (3.275)
Fixed Effect	City	City
Cluster Std. Error	Cluster City+Year	Cluster City+Year
Obs	987	842

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Although the statistical results from these two tables do not shed light on the impact of STEM OPT extension/expansion on foreign investment, there might be other events happening during those years that hinder the estimated results. For instance, the Global Financial Crisis, Greece Crisis, Brexit, the U.S. presidential election, or other events could also affect the decisions on injecting international funds into immigrant-founded companies in the U.S.

Turning attention to lagged effect, Table 3 and 4 shows the regression results upon using one-year-lagged dummies instead. Still, the impact of STEM OPT change is unclear to international investment in immigrant-founded firms.

### 3.3 Adding FDI

One possible way to check whether foreign investments in immigrant-founded firms are indeed affected by STEM OPT policy change is to control Foreign Direct Investment. This is to exclude the effect from the supply side in the investment market. I first take a look at the correlation (and comovement) of Foreign Direct Investment and the Annual International Investments to Immigrant-founded Firms. Figure 3 shows the comovements of these two variables. The variation of FDI is comparatively smaller than the dispersion of Int'l Inv. in Immig. Firms, throughout the sample period. This implies that the FDI and international investment in our data are quite intuitive and credible (Less investment in early years and GFC, more investment in recent years; concave shape).

Table 5 shows the estimation of the coefficient after the addition of FDI. In summary, yes, the STEM OPT policy dummy significantly predict the FDI increase in the year 2016 and year 2017. It is potentially an implication that the policy change induces more immigrant entrepreneurs into the market shortly. However, it takes more tests to validate the story. Doing the same thing, let us focus only on a more "balanced" panel. If the above story is valid, then we should anticipate that the effect is more pronounced in a panel

Table 3: Int'l Inv. to Immigrant Founded Firms: More Balanced Panel

	(1)	(2)
	Level	Growth
L.STEM OPT CHANGE ON 2008	-1.071** (-2.701)	-0.963*** (-3.566)
L.STEM OPT CHANGE ON 2011	0.063 (0.361)	0.524* (1.874)
L.STEM OPT CHANGE ON 2012	0.053 (0.208)	-0.578*** (-3.188)
L.STEM OPT CHANGE ON 2016	0.719** (2.357)	-0.601** (-2.340)
L.Int'l Inv. to Immigrant Founded Firms	0.036 (0.652)	
L.Growth of Int'l Inv. to Immigrant Founded Firms		-0.527*** (-11.475)
Annual Common Trend (Year)	0.114 (1.643)	0.150*** (3.354)
Fixed Effect	City	City
Cluster Std. Error	Cluster City+Year	Cluster City+Year
Obs	1598	1120

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ 

Table 4: Int'l Inv. to Immigrant Founded Firms: More Balanced Panel

	(1)	(2)
	Level	Growth
L.STEM OPT CHANGE ON 2008	-1.178*** (-3.131)	-1.145*** (-3.721)
L.STEM OPT CHANGE ON 2011	0.162 (0.909)	0.522** (2.110)
L.STEM OPT CHANGE ON 2012	0.107 (0.316)	-0.632** (-2.241)
L.STEM OPT CHANGE ON 2016	0.396 (1.383)	-0.823*** (-3.151)
L.Int'l Inv. to Immigrant Founded Firms	0.123*** (2.913)	
L.Growth of Int'l Inv. to Immigrant Founded Firms		-0.501*** (-14.553)
Annual Common Trend (Year)	0.133** (2.101)	0.182*** (3.421)
Fixed Effect	City	City
Cluster Std. Error	Cluster City+Year	Cluster City+Year
Obs	987	842

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$



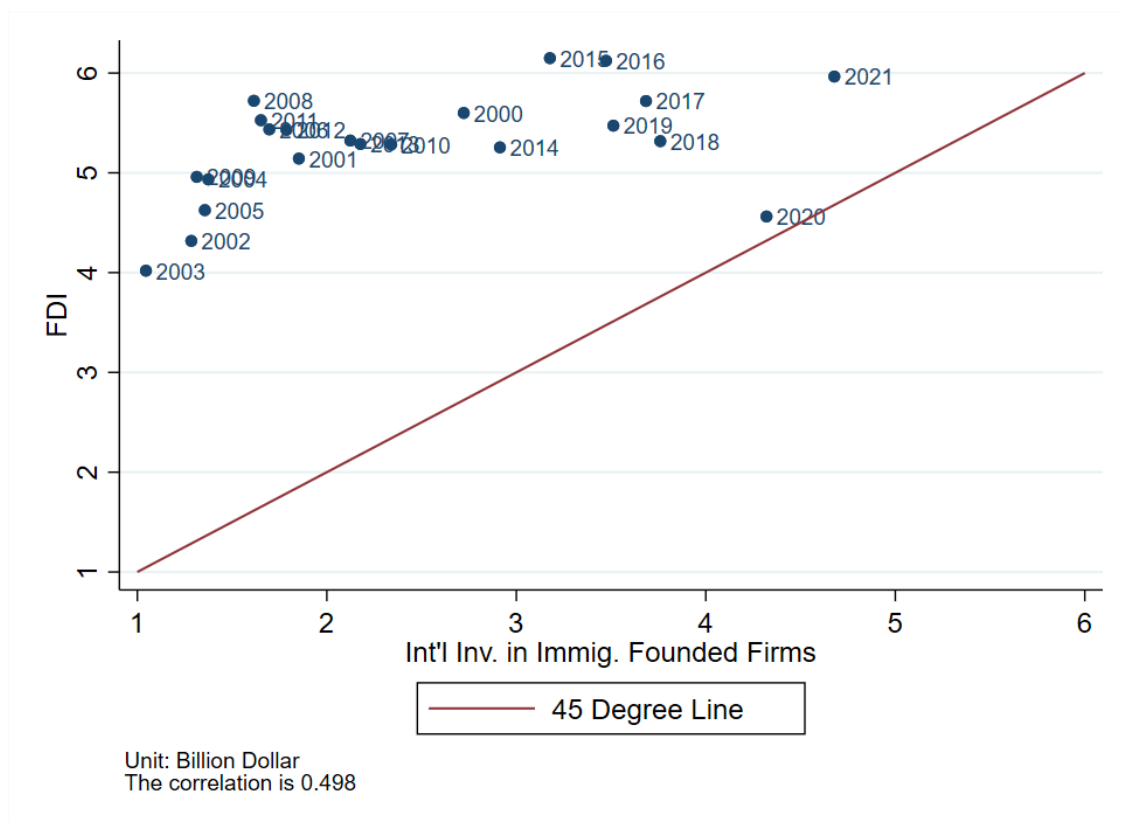


Figure 3: FDI & Int'l Inv. in Immig. Firms Comovement

sample (since a more panel sample implies that cities included are more intensive/active to entrepreneurship throughout history, and thus, should be more people creating entrepreneurship there). Table 6 exhibits the results. There is an economic significant coefficient on the 2016 policy change, but its lagged variable does not. Still, the lagged variable shows a positive sign, advocating that the effect of STEM OPT extension could bring more international investment from the demand side story perspective.

Table 5: FDI

	(1) Level	(2) Level	(3) Growth	(4) Growth
Policy 2008	-0.796*** (-3.227)		-0.668*** (-3.142)	
Policy 2011	-0.287* (-1.762)		-0.005 (-0.041)	
Policy 2012	0.154 (0.707)		0.176 (0.614)	
Policy 2016	0.834*** (3.059)		-0.483** (-2.354)	
L.Policy 2008		-0.944** (-2.712)		-1.051*** (-3.644)
L.Policy 2011		0.128 (0.709)		0.542* (1.994)
L.Policy 2012		0.082 (0.335)		-0.631*** (-3.552)
L.Policy 2016		0.749** (2.376)		-0.818*** (-3.051)
Fixed Effect	City	City	City	City
Cluster Std. Error	Cluster City+Year	Cluster City+Year	Cluster City+Year	Cluster City+Year
Obs	1598	1598	1120	1120

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

### 3.4 Comments from Melanie

Here is a comment from Melanie: “Could you replicate Table 1 for the outcomes: log and inverse hyperbolic sine of the number of immigrant entrepreneurs with at least one deal in a year? I.e., for the IHS, keep around the cities with no immigrants currently raising funds. (Most directly, we think OPT could affect the number of immigrant entrepreneurs.)”

Instead of looking at the foreign investment, let us turn our attention to the number of firms founded at the city-year level, and test whether the STEM OPT policy change would affect the change in the number of entrepreneurship companies. For explanation, I calculate three categories of the variable of interest: the number of firms founded by 1) entirely native, 2) entirely immigrant, and 3) mixture. and take two kinds of transformations: 1) natural log and 2) inverse hyperbolic sine. In specific,

Log form :  $\ln(1 + \# \text{ of firms in category } i)$  AND IHS form :  $\text{asinh}(\# \text{ of firms in category } i)$

Before diving into the regression, Figure 4 and 5 depict the relationships of two variables: the number of firms and the number of immigrant-founded (involved) firms. The first shows the mean of city-year level measurement over the year, and the second one appends the 95% CI. It is relatively clear that there is a drop in both measurements in the year 2016.

With these preheats it seems that the regression results might go opposite to our conjecture. I only show one regression result here just to confirm that the sign of the policy 2016 change is negative. Other thoughts and

Table 6: FDI (More Balanced)

	(1)	(2)	(3)	(4)
	Level	Level	Growth	Growth
Policy 2008	-0.799*** (-3.013)		-0.633** (-2.851)	
Policy 2011	-0.396** (-2.458)		-0.030 (-0.269)	
Policy 2012	0.365 (1.307)		0.255 (0.763)	
Policy 2016	0.649** (2.130)		-0.374 (-1.155)	
L.Policy 2008		-1.082*** (-2.968)		-1.238*** (-3.594)
L.Policy 2011		0.205 (1.083)		0.536** (2.217)
L.Policy 2012		0.122 (0.355)		-0.688** (-2.499)
L.Policy 2016		0.409 (1.401)		-1.043*** (-3.305)
Fixed Effect	City	City	City	City
Cluster Std. Error	Cluster City+Year	Cluster City+Year	Cluster City+Year	Cluster City+Year
Obs	987	987	842	842

T-statistics in parenthesis

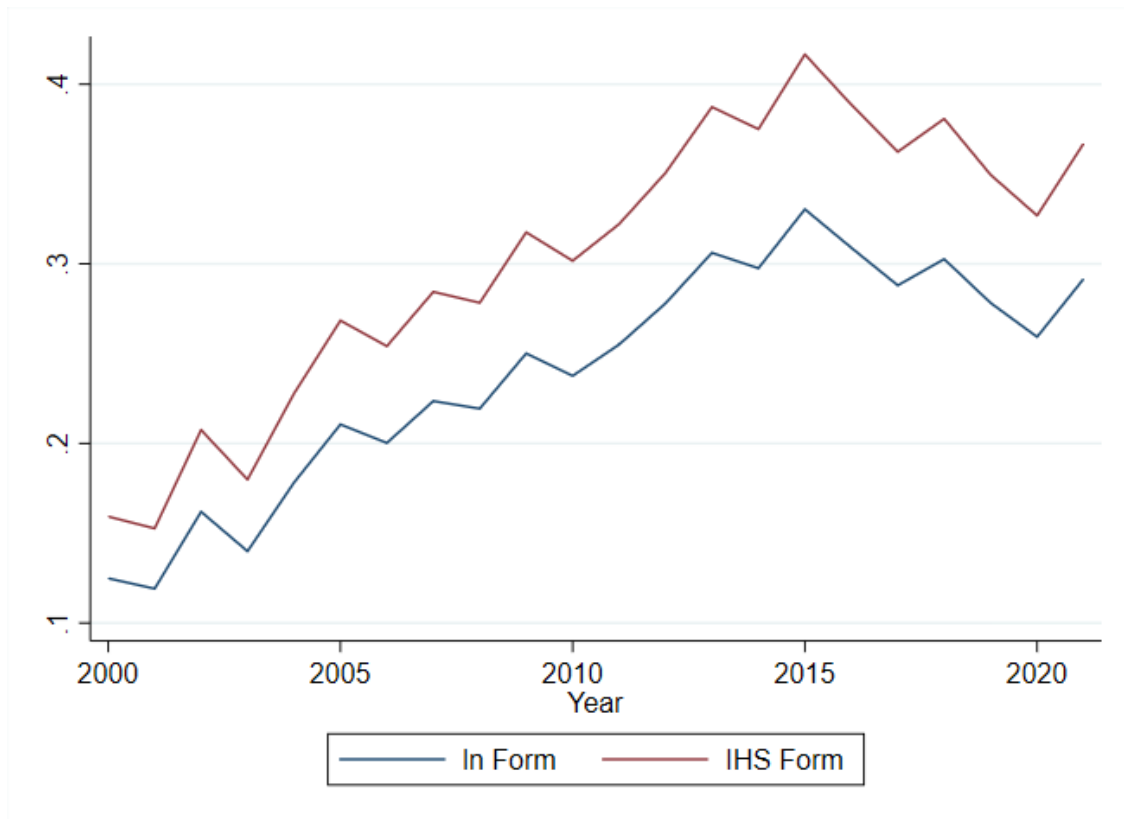
\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ 

Figure 4: Mean

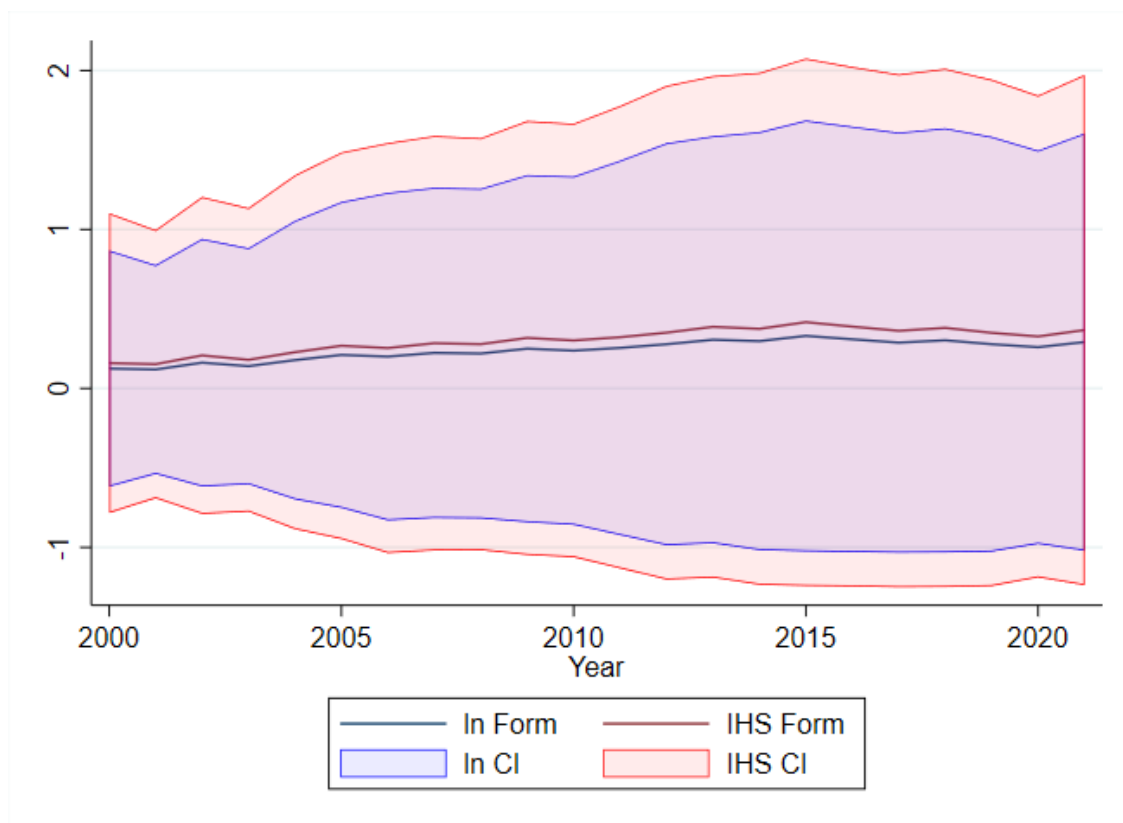


Figure 5: Mean + CI

related regression results are shown in the Appendix. Table 7 and 8 illustrate the entirely native-founded firms and the entirely immigrant-founded firms' variation with respect to the STEM OPT policy change. As expected, the coefficients on policy 2016 are negative. Even the comparable policy change in 2008 has undetermined coefficients.

Table 7: NATIVE

	(1)	(2)	(3)	(4)
	ln	ln	ih	ih
Policy 2008	-0.076 (-1.065)		-0.089 (-1.046)	
Policy 2011	0.031 (0.525)		0.023 (0.344)	
Policy 2012	0.116** (2.423)		0.128** (2.306)	
Policy 2016	-0.340*** (-4.062)		-0.386*** (-4.014)	
L.Policy 2008		0.030 (0.375)		0.028 (0.310)
L.Policy 2011		0.182*** (3.919)		0.200*** (3.922)
L.Policy 2012		0.026 (0.699)		0.021 (0.494)
L.Policy 2016		-0.194** (-2.358)		-0.220** (-2.380)
Controls	✓	✓	✓	✓
Obs	6961	6961	6961	6961

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

### 3.5 Replicating Melanie's Trial

In the last part of this report, I replicate Melanie's result (14\_stem\_opt\_extension on Dropbox Code folder). The idea is to use a DiD between the native-founded firms and the immigrant-involved-founded firms, i.e. take immigrant-involved firms as a treated group while native-founded is control. I went through the code on Dropbox, and I modified and generate my code in the last part of the "STEM-OPT" Stata do file.

The results are not as satisfying as expected. The drop in 2016 persists in the regression results. And the difference between the number of native-founded firms and the number of immigrant-founded firms keeps enlarging, starting from that the immigrant-founded is less than the native-founded. And the 2016 policy, which tells from the estimated coefficient, makes the dispersion even bigger. Table 9 shows the regression results.

Table 8: IMMIGRANT

	(1) ln	(2) ln	(3) lhs	(4) lhs
Policy 2008	-0.102 (-1.677)		-0.127 (-1.613)	
Policy 2011	0.060 (1.270)		0.068 (1.143)	
Policy 2012	0.019 (0.559)		0.007 (0.166)	
Policy 2016	-0.273*** (-4.208)		-0.332*** (-4.051)	
L.Policy 2008		-0.042 (-0.704)		-0.059 (-0.812)
L.Policy 2011		0.083* (1.911)		0.084 (1.635)
L.Policy 2012		0.028 (1.257)		0.030 (1.042)
L.Policy 2016		-0.192*** (-3.198)		-0.236*** (-3.247)
Controls	✓	✓	✓	✓
Obs	6961	6961	6961	6961

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ 

Table 9: Firms founded by Treat/Control

	(1) ln	(2) lhs
Immigrant	-0.762*** (-26.291)	-0.940*** (-29.009)
Treat X 2016 Dummy	-0.087*** (-4.222)	-0.094*** (-3.784)
Controls		
Obs	24476	24476

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

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## A More Regression Results

### A.1 Additional Graph

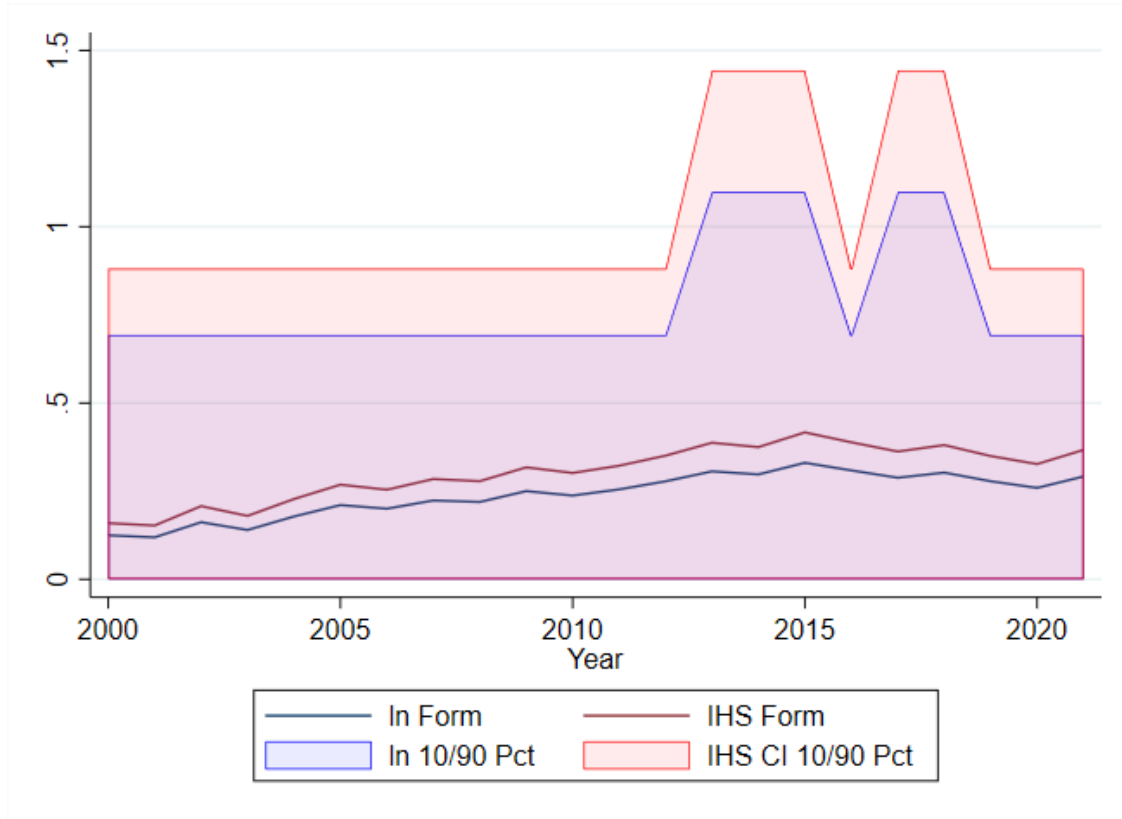


Figure 6: Mean with Percentile

### A.2 Thoughts and Tables

The following tables show in order with thoughts as follows

- Table 10: Simple likelihood regression (no lag & lagged) and control for lagged FDI
- Table 11: Modify above, restrict to having immigrant founded firm in that city in the history
- Table 12: Modify above, no restriction, but adding the number of firms raising funds in that year
- Table 13: New thought, consider only extension and no expansion? (i.e. consider only policies extending the length of STEM OPT). Regress only immigrant firms. City-year Cluster std. City fixed effect.
- Table 14: Decompose the number of firms in terms of who founded



Table 10: Number of Immigrant Firm

	(1)	(2)	(3)	(4)
	ln	ln	IHS	IHS
Policy 2008	-0.059*		-0.076*	
	(-1.946)		(-1.995)	
Policy 2011	0.028		0.032	
	(1.006)		(0.920)	
Policy 2012	0.044*		0.055*	
	(1.778)		(1.738)	
Policy 2016	-0.195***		-0.245***	
	(-5.364)		(-5.446)	
L.Policy 2008		-0.006		-0.007
		(-0.172)		(-0.160)
L.Policy 2011		0.051**		0.061**
		(2.165)		(2.125)
L.Policy 2012		0.054***		0.068***
		(3.087)		(3.093)
L.Policy 2016		-0.138***		-0.172***
		(-3.619)		(-3.597)
Fixed Effect	City	City	City	City
Cluster Std. Error	Cluster City+Year	Cluster City+Year	Cluster City+Year	Cluster City+Year
Obs	9995	9995	9995	9995

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ 

Table 11: Number of Immigrant Firms

	(1)	(2)	(3)	(4)
	ln	ln	IHS	IHS
Policy 2008	-0.077*		-0.098**	
	(-2.084)		(-2.131)	
Policy 2011	0.015		0.016	
	(0.494)		(0.404)	
Policy 2012	0.053*		0.066*	
	(1.884)		(1.836)	
Policy 2016	-0.222***		-0.280***	
	(-5.552)		(-5.631)	
L.Policy 2008		-0.028		-0.034
		(-0.802)		(-0.780)
L.Policy 2011		0.047**		0.055**
		(2.220)		(2.145)
L.Policy 2012		0.065***		0.083***
		(3.531)		(3.520)
L.Policy 2016		-0.164***		-0.205***
		(-3.845)		(-3.819)
Fixed Effect	City	City	City	City
Cluster Std. Error	Cluster City+Year	Cluster City+Year	Cluster City+Year	Cluster City+Year
Obs	7504	7504	7504	7504

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Table 12: Number of Immigrant Firms

	(1) ln	(2) ln	(3) IHS	(4) IHS
Policy 2008	0.006 (0.264)		-0.000 (-0.013)	
Policy 2011	0.018 (1.550)		0.024 (1.549)	
Policy 2012	-0.012 (-0.717)		-0.007 (-0.316)	
Policy 2016	-0.115*** (-3.668)		-0.156*** (-3.935)	
L.Policy 2008		0.037 (1.559)		0.041 (1.359)
L.Policy 2011		-0.013 (-1.051)		-0.007 (-0.417)
L.Policy 2012		0.025 (1.532)		0.035 (1.702)
L.Policy 2016		-0.083*** (-2.886)		-0.111*** (-2.906)
Fixed Effect	City	City	City	City
Cluster Std. Error	Cluster City+Year	Cluster City+Year	Cluster City+Year	Cluster City+Year
Obs	7504	7504	7504	7504

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ 

Table 13: Number of Immigrant Firms

	(1) ln	(2) ln	(3) IHS	(4) IHS	(5) ln	(6) ln	(7) IHS	(8) IHS
Policy 2008	0.008 (0.365)		-0.003 (-0.095)		-0.107** (-2.366)		-0.134** (-2.416)	
Policy 2016	-0.118*** (-4.640)		-0.165*** (-4.947)		-0.259*** (-6.206)		-0.324*** (-6.301)	
L.Policy 2008		0.032 (1.402)		0.034 (1.146)		-0.044 (-1.024)		-0.055 (-1.022)
L.Policy 2016		-0.085*** (-3.064)		-0.116*** (-3.100)		-0.186*** (-3.773)		-0.232*** (-3.772)
Setting	Same	Same	Same	Same	Same	Same	Same	Same
Add. Ctrl.	Total Firms	Total Firms	Total Firms	Total Firms	Total Firms	Total Firms	Total Firms	Total Firms
Obs	7504	7504	7504	7504	7504	7504	7504	7504

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Table 14: Number of Immigrant Firms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ln	ln	IHS	IHS	ln	ln	IHS	IHS
Policy 2008	-0.032 (-0.464)		-0.040 (-0.463)		-0.066 (-1.508)		-0.083 (-1.500)	
Policy 2016	-0.293*** (-3.763)		-0.343*** (-3.658)		-0.213*** (-4.289)		-0.263*** (-4.249)	
L.Policy 2008		0.025 (0.360)		0.027 (0.327)		-0.037 (-0.926)		-0.048 (-0.970)
L.Policy 2016		-0.183** (-2.606)		-0.214** (-2.593)		-0.160*** (-3.794)		-0.200*** (-3.826)
Setting	Same	Same	Same	Same	Same	Same	Same	Same
Founded By	Native	Native	Native	Native	Immig	Immig	Immig	Immig
Obs	6961	6961	6961	6961	6961	6961	6961	6961

T-statistics in parenthesis

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$